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10/026,137

12/18/2001

James P. Viken

23,318-40

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7590

04/16/2004

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EXAMINER

VERDIER, CHRISTOPHER M

ART UNIT

PAPER NUMBER

3745

DATE MAILED: 04/16/2004

*24*

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/026,137

Applicant(s)

VIKEN, JAMES P.

Examiner

Christopher Verdier

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 2-5, 24-41 and 51-61 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 25, 28-30, 34-41 and 59-61 is/are allowed.
- 6) ☒ Claim(s) 2-5, 24, 26, 31-33, 51, 52 and 54-58 is/are rejected.
- 7) ☒ Claim(s) 27 and 53 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

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Applicant's Amendment dated March 3, 2004 has been carefully considered but is deemed non-persuasive. Claims 2-5, 24-41, and 51-61 are pending. Applicant has amended the claims to adopt the examiner's suggested claim language, with the exception of claim 56, line 2, which appears to be an oversight. The claims have been amended to overcome the rejections under 35 USC 112, first and second paragraphs set forth in the previous Office action. Correction of the above matters is noted with appreciation.

Applicant's declaration filed on March 3, 2004 under 37 CFR 1.131 is sufficient to overcome the Chen 5,337,708 reference. The declaration filed on March 3, 2004 under 37 CFR 1.131 is insufficient to overcome the Parker 5,370,160 reference with regard to the subject matter of Applicant's claims 26 and 31-33, because the claim limitations therein of measuring a fluid parameter in the first and second conduits during the exchange condition (claim 26), the measuring of the fluid parameter in the first and second conduits being accomplished with a pressure indicator (claim 31), the measuring of the fluid parameter in the first and second conduits being accomplished with a fluid flow meter (claim 32), and the fluid flow meter being electronic (claim 33), have not been addressed in the declaration filed on March 3, 2004 and Applicant has not provided evidence of reduction to practice of these claim limitations.

With regard to the rejection claims 51-52 under 35 U.S.C. 102(b) as being anticipated by Japanese Patent 2-72,299, Applicant has argued that the Japanese Patent does not disclose a first operational condition where the used fluid is passed through the bypass fluid line and reintroduced into the cooling circuit without flow restriction, because flow through the bypass

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conduit is substantially restricted and an unequal pressure exists on either side of pressure responsive valve 12, because the pressure responsive valve only provides selective communication at high pressure conditions, i.e. when the inflow pressure reaches higher than ordinary pressure, such as when valve 6 closes, and that operating as a pressure relief device, flow through the conduit 11 would occur only when the pressure is substantially greater than the ordinary operating pressure of the vehicle. The examiner agrees that the pressure responsive valve 12 opens at high pressure conditions, but when the valve 12 is open, it is unrestricted, because it is open to allow flow of used fluid from line 2, through line 11, and into line 3 and back into the transmission. The limitation of equal pressure conditions existing is not recited in claims 51 and 52. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). However, the examiner's position is that the pressure at the inlet of the valve 12 is equal to the pressure at the outlet of valve, when the valve 12 is open. Certain ones of Applicant's claims (claim 4, line 9, claim 57, line 14, and claim 58, line 18) recite "at an equal pressure" or "at an equalized pressure", but these claims are indefinite as set forth later below because it is unclear in the claims what this pressure is relative to.

Applicant's argument concerning the rejection of claims 24, 26, 32, and 56-58 under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent 2-72,299 in view of Becnel 3,513,941 is that the Japanese Patent does not teach or suggest an unrestricted bypass conduit, and does not teach a bypass conduit which permits fluid to be recirculated back to the vehicle with a minimal pressure increase. The examiner disagrees with these arguments for the reasons set forth above,

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and for the reason that the pressure at the inlet of the valve 12 is equal to the pressure at the outlet of valve, when the valve 12 is open. Note also that claims 24, 26, 32 do not recite any limitations related to pressure. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Applicant's arguments with regard to the rejection of claim 33 under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent 2-72,299 and Becnel 3,513,941, the rejection of claims 26 and 31-33 under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent 2-72,299 and Becnel 3,513,941 and Parker 5,370,160, and the rejection of claims 54-55 under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent 2-72,299 in view of either (Ohta 4,938,315 or Takeuchi 4,095,673) are the same, namely that the Japanese Patent does not teach or suggest an unrestricted bypass conduit, and does not teach a bypass conduit which permits fluid to be recirculated back to the vehicle with a minimal pressure increase. The examiner disagrees with these arguments for the reasons set forth above.

### ***Election/Restriction***

The number of claims has increased significantly throughout the prosecution of this application. Additionally presented claims may require reconsideration of whether restriction is warranted.

### ***Examiner's Suggestions to Claim Language***

The following are suggestions to improve the clarity and precision of the claims:

In claim 51, line 9, -- the -- may be inserted after "with".

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In claim 56, line 2, "machine" may be changed to -- system --.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4-5 and 57-58 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 4, line 9, "is passed through the bypass conduit at an equal pressure" is indefinite, because it is unclear what this pressure is relative to (the pressure at the inlet compared to the outlet, the pressures in the first and/or second conduits, the pressure in the fluid exchange system, are examples). In claim 57, lines 14-15, "is passed at an equalized pressure through the bypass conduit" is indefinite for the same reason. In claim 58, lines 18-19, "is passed through the bypass conduit at an equalized pressure and into the second conduit" is indefinite for the same reason.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claims 3-5 (as far as claims 4-5 are definite), and 51-52 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Patent 2-72,299. Note the fluid exchange system 1 for performing a fluid exchange procedure on automatic transmission A of a vehicle having a pair of transmission cooling circuit ports D1, D4, with the fluid exchange system comprising first conduit 2 communicating fluid from the transmission, second conduit 3 communicating fluid to the transmission, and bypass conduit 11 (having pressure responsive valve 12 which provides selective communication at high pressure conditions, see page 16, paragraph 4 of Applicant's English translation thereof) for selectively communicating fluid between the pair of transmission cooling circuit ports, with a bypass mode being established by selectively coupling the bypass conduit between the pair of transmission cooling circuit ports, so that used fluid from the fluid circuit is passed through the bypass conduit at an equal pressure (the pressure at the inlet of the valve 12 is equal to the pressure at the outlet of valve, when the valve 12 is open), with an exchange mode of operation being established by selectively uncoupling the bypass conduit and coupling the first and second conduits so that used fluid from the fluid circuit is received into the first conduit and fresh fluid is received into the second conduit and introduced into the accessed fluid circuit. Note fresh fluid receptacle 10 and used fluid receptacle 7, at least one of which is removable from the exchange system for refilling or emptying purposes. The Japanese Patent also discloses the method of exchanging used fluid with fresh fluid in the automatic transmission, with the used fluid initially being contained within the transmission, and with a substantial portion of the used fluid being subsequently discharged into receptacle 7, with the fresh fluid initially being contained in source container 10, comprising identifying transmission cooling circuit C-D, uncoupling a portion of the transmission cooling circuit to provide access to

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first port D1 and second port D4, with first port D1 directing used transmission fluid outwardly from the automatic transmission under pressure from the automatic transmission, providing the fluid exchange system 1 with first conduit 2, second conduit 3, and bypass conduit 11 providing selective fluid communication fluid between the first conduit and the second conduit, selectively coupling the bypass conduit 11 to the first and second transmission cooling circuit ports, energizing the transmission to flow used fluid through the bypass conduit 11 and back into the transmission cooling circuit via line 3, with the flow being unrestricted by the bypass conduit 11 when the valve 12 is open, selectively stopping the flow in the bypass conduit when valve 12 is closed, and providing the first conduit 2 and second conduit 3 in fluid communication with the first and second transmission cooling circuit ports and flowing used fluid into the first conduit 2 and flowing fresh fluid into the second conduit 3 during an exchange procedure. Note the first fluid line 2 selectively intercoupled to the fluid exchange system 1, and one D1 of a pair of transmission cooling circuit ports to conduct fluid from a cooling circuit of a vehicle, second fluid line 3 selectively intercoupled to the fluid exchange system 1, source 10 of fresh fluid, and the other one D4 of the pair of transmission cooling circuit ports to conduct fluid into the cooling circuit, bypass fluid line 11 in selective fluid communication with the pair of transmission cooling circuit ports, bypass valve assembly 12 in communication with the bypass fluid line 11, with the fluid exchange system having a pair of operational conditions including a first operational condition where used fluid is passed through the bypass line and reintroduced into cooling circuit, and without flow restriction, and a second operational condition wherein used fluid is received into the first fluid line and fresh fluid is received into the second fluid line and



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introduced into the cooling circuit. Note electrically operated valves 6, 9 for controlling fluid flow through either one or both of the first and second fluid lines.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 24, 26, 32, and 56-58 (as far as claims 57-58 are definite), are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent 2-72,299 in view of Becnel 3,513,941. Japanese Patent 2-72,299 discloses a fluid exchange system and a method of exchanging used fluid with a fresh fluid in a vehicle having an automatic transmission connected to a fluid cooling circuit substantially as claimed as set forth above, but does not disclose that the transmission has an internal fluid pump to conduct circulated fluid in the fluid cooling circuit (claims 24 and 26 and 57-58), does not disclose measuring a fluid parameter in the first and second conduits during the exchange condition (claim 26), via a fluid flow meter (claim 32), and does not disclose that the first and second fluid lines each include a flexible conduit extending from the fluid exchange machine (claim 56).

Becnel (figure 1 and column 1, lines 64-72 and column 2, lines 1-16) shows a fluid change apparatus for an automatic transmission 10, which is provided with at least two internal

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pumping units, each of which discharges into a line 12 leading to a cooler 14 mounted in or adjacent radiator 16, with a return line 18 connecting the cooler back to the transmission pan or sump, for the purpose of circulating automatic transmission fluid in the transmission. A fluid parameter in the form of the amount of fresh fluid supplied to the automatic transmission is indicated via gauge 35 which is a fluid flow meter, and a fluid parameter in the form of the amount of used fluid conducted from the transmission is indicated via gauge 37, which is a fluid flow meter, for the purpose of indicating to the operator the amounts of fresh fluid supplied and conducted from the automatic transmission. A first fluid line 21 and a second fluid line 24 are flexible, for the purpose of allowing ease of movement and connection to the automatic transmission.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to provide the fluid exchange system and method of exchanging used fluid with a fresh fluid of the Japanese Patent with an internal fluid pump located in the automatic transmission, as taught by Becnel, for the purpose of circulating automatic transmission fluid in the transmission, to measure a fluid parameter in the first and second conduits during the exchange condition via a fluid flow meter, as taught by Becnel for the purpose of indicating to the operator the amounts of fresh fluid supplied and conducted from the automatic transmission, and to form the first and second fluid lines such that they each include a flexible conduit extending from the fluid exchange machine, as taught by Becnel, for the purpose of allowing ease of movement and connection to the automatic transmission.

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Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent 2-72,299 and Becnel 3,513,941 as applied to claim 32 above, and further in view of Applicant's Admitted Prior Art. The modified method of exchanging used fluid with a fresh fluid of the Japanese Patent shows all of the claimed subject matter including measuring the fluid parameter of flow rates in the first and second conduits during the exchange condition, but does not show that the fluid flow meters are electronic.

Applicant did not traverse the examiner's assertion of official notice that it is known to those of ordinary skill in the art that modern electronically indicating fluid flow meter gauges are used in instances where it is desired to obtain a more accurate measure of the flow rate via an electronic readout. The common knowledge or well-known in the art statement is taken to be admitted prior art because applicant failed to traverse the examiner's assertion of official notice. MPEP 2144.03.

It would have been further obvious at the time the invention as made to a person having ordinary skill in the art to replace the flow meters of the modified fluid exchange apparatus and method of the Japanese Patent with modern electronically indicating fluid flow meter gauges, as taught by Applicant's Admitted Prior Art, for the purpose of obtaining a more accurate measure of the flow rate via an electronic readout.

Claims 26 and 31-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent 2-72,299 and Becnel 3,513,941 and Parker 5,370,160. Japanese Patent 2-72,299

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discloses a method of exchanging used fluid with a fresh fluid in a vehicle having an automatic transmission connected to a fluid cooling circuit, with a fluid exchange system 1 for performing a fluid exchange procedure on automatic transmission A of a vehicle comprising first conduit 2 communicating fluid from the transmission, second conduit 3 communicating fluid to the transmission, bypass conduit 11 (having pressure responsive valve 12 which provides selective communication at high pressure conditions, see page 16, paragraph 4 of Applicant's English translation thereof) selectively communicating fluid between the first conduit and the second conduit where the first conduit and the second conduit are coupled into an accessed fluid circuit C-D of the vehicle, with a bypass mode being established by selectively coupling the bypass conduit between the first and second conduits so that used fluid from the fluid circuit is received into the first conduit, passed through the bypass conduit, and into the second fluid conduit so that used fluid is reintroduced into the accessed fluid circuit, with an exchange mode of operation being established by selectively uncoupling the bypass conduit between the first and second conduits so that used fluid from the fluid circuit is received into the first conduit and fresh fluid is received into the second conduit and introduced into the accessed fluid circuit. Note fresh fluid receptacle 10 and used fluid receptacle 7, at least one of which is removable from the exchange system for refilling or emptying purposes. The Japanese Patent also discloses the method of exchanging used fluid with fresh fluid in the automatic transmission, with the used fluid initially being contained within the transmission, and with a substantial portion of the used fluid being subsequently discharged into receptacle 7, with the fresh fluid initially being contained in source container 10, comprising identifying transmission cooling circuit C-D, uncoupling a portion of the transmission cooling circuit to provide access to first port D1 and

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second port D4, with first port D1 directing used transmission fluid outwardly from the automatic transmission under pressure from the automatic transmission, providing the fluid exchange system 1 with first conduit 2, second conduit 3, and bypass conduit 11 selectively communicating fluid between the first conduit and the second conduit, coupling first conduit 2 to the first port D1, coupling second conduit 3 to the second port D4 via radiator C and line D3, energizing the transmission to flow used fluid through first conduit 2, bypass line 11, and second conduit 3, and selectively blocking fluid communication between the first conduit 2 and the second conduit 3 via bypass conduit 11 and valve 12 thus flowing used fluid into the first conduit 2 and flowing fresh fluid into the second conduit 3 during an exchange procedure.

However, Japanese Patent 2-72,299 does not disclose that the transmission has an internal fluid pump to conduct circulated fluid in the fluid cooling circuit, and does not disclose measuring a fluid parameter in the first and second conduits during the exchange condition, via a pressure indicator, or via a fluid flow meter.

Becnel (figure 1 and column 1, lines 64-72 and column 2, lines 1-16) shows a fluid change apparatus for an automatic transmission 10, which is provided with at least two internal pumping units, each of which discharges into a line 12 leading to a cooler 14 mounted in or adjacent radiator 16, with a return line 18 connecting the cooler back to the transmission pan or sump, for the purpose of circulating automatic transmission fluid in the transmission.

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It would have been obvious at the time the invention was made to a person having ordinary skill in the art to provide the fluid exchange system and method of exchanging used fluid with a fresh fluid of the Japanese Patent 2-72,299 with an internal fluid pump located in the automatic transmission, as taught by Becnel, for the purpose of circulating automatic transmission fluid in the transmission.

Parker (figure 3) shows a method of exchanging used fluid with a fresh fluid in a vehicle having an automatic transmission connected to a fluid cooling circuit whereby pressure is measured in a first supply conduit 15 via pressure gauge 43 and flow rate is measured via flow meter 41 in the first conduit, and pressure is measured in a second removal conduit 13 via pressure gauge 25 and flow rate is measured via flow meter 31 in the second conduit, for the purpose of indicating the pressure and flow rate of fresh fluid flowing into the transmission and used fluid flowing out of the transmission during an exchange procedure.

It would have been further obvious at the time the invention was made to a person having ordinary skill in the art to provide the modified fluid exchange method of Japanese Patent 2-72,299 with pressure gauges and flow rate meters in the first and second conduits, as taught by Parker, for the purpose of indicating the pressure and flow rate of fresh fluid flowing into the transmission and used fluid flowing out of the transmission during an exchange procedure.

Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent 2-72,299 and Becnel 3,513,941 and Parker 5,370,160 as applied to claim 32 above, and further in

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view of Applicant's Admitted Prior Art.. The modified method of exchanging used fluid with a fresh fluid of Japanese Patent 2-72,299 shows all of the claimed subject matter except for the fluid flow meters being electronic. Rather, the flow meters are sight gauges, which are visual.

Applicant did not traverse the examiner's assertion of official notice that it is known to those of ordinary skill in the art that visual sight gauges (which are a mechanical type gauge) are replaceable via modern electronically indicating fluid flow meter gauges, for the purpose of obtaining a more accurate measure of the flow rate via an electronic readout. The common knowledge or well-known in the art statement is taken to be admitted prior art because applicant failed to traverse the examiner's assertion of official notice. MPEP 2144.03.

It would have been further obvious at the time the invention as made to a person having ordinary skill in the art to replace the mechanical sight gauges of the modified fluid exchange apparatus and method of Japanese Patent 2-72,299 with modern electronically indicating fluid flow meter gauges, as taught by Applicant's Admitted Prior Art, for the purpose of obtaining a more accurate measure of the flow rate via an electronic readout.

Claims 54-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent 2-72,299 in view of either (Ohta 4,938,315 or Takeuchi 4,095,673). The Japanese Patent discloses a fluid exchange machine substantially as claimed as set forth above, but does not disclose that the fresh fluid source 10 and used fluid source 7 are on a portable chassis.

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Ohta (figure 1) and Takeuchi (figure 1) show oil change machines whereby fresh and used fluid sources 15B, 15A, and 5, 4, respectively, are located on portable chassis 10, 1, respectively, for the purpose of allowing ease of transport.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to form the fluid exchange machine of the Japanese Patent such that the fresh fluid source 10 and used fluid source 7 are on a portable chassis, as taught by either Ohta or Takeuchi, for the purpose of allowing ease of transport.

*Allowable Subject Matter*

Claims 25, 28-30, 34-41, and 59-61 are allowed.

Claims 27 and 53 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**



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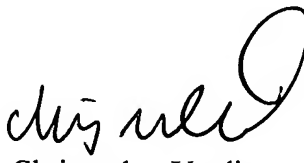
MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Verdier whose telephone number is (703)-308-2638. The examiner can normally be reached on Monday-Friday from 10:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward K. Look can be reached on (703) 308-1044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

C.V.  
April 14, 2004

  
Christopher Verdier  
Primary Examiner  
Art Unit 3745